

<b>BIOGRAPHICAL SKETCH</b>			
<b>NAME</b>	<b>POSITION TITLE</b>		
<b>Leonardo A. SECHI</b>	<b>Full Professor of Microbiology</b>		
<b>EDUCATION/TRAINING</b>			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
University of Sassari, Italy	BS	1989	Biology
University of Sassari, Italy	Specialization	1993	Microbiology and Virology
Temple University, Philadelphia, PA	Postdoc	1990-1993	Microbiology
Istituto di Microbiologia e Virologia, University of Sassari, Italy	Assistant Professor	1994-2000	Microbiology
Faculty of Sciences, University of Sassari, Italy	Associate Professor	2001-2006	Microbiology
Faculty of Medicine, University of Sassari, Italy	Full Professor	2007-present	Microbiology

**A. Positions and Honors.**

**Other positions**

2012: Member of the ANVUR (Italian Agency for the Evaluation of the University and Research)  
 2012: Member of the Experts Panel for the Ministero dell'Istruzione, Università e Ricerca (MIUR) for the Development and Research

2008-2011: Erasmus Delegate, Faculty of Science, University of Sassari

2009-2011: Member of the Visiting Professor Committee, University of Sassari

2007-2011: Responsible of the Microbiology Section, Department of Biomedical Sciences, University of Sassari

**Honors**

2007: Award for the #1 ranking investigator for Scientific Productivity, University of Sassari

He has an h index of 36 by google scholar ([http://scholar.google.it/citations?user=2CIA\\_SkAAAAJ&hl=it](http://scholar.google.it/citations?user=2CIA_SkAAAAJ&hl=it)) and of 29 by Scopus

**Peer-reviewed publications**

L.A. Sechi has published up to now 170 papers in international peer reviewed journals.

Peer-reviewed publications of the last 5 years (in chronological order).

Cossu A, Sechi LA, Bandino E, Zanetti S, Rosu V. Expression profiling of Mycobacterium tuberculosis H37Rv and Mycobacterium smegmatis in acid-nitrosative multi-stress displays defined regulatory networks. *Microb Pathog.* 2013 Nov 1. doi:pii: S0882-4010(13)00139-3. 10.1016/j.micpath.2013.10.004.

Mameli G, Cossu D, Cocco E, Masala S, Frau J, Marrosu MG, Sechi LA. EBNA-1 IgG titers in Sardinian multiple sclerosis patients and controls. *J Neuroimmunol.* 2013 Nov 15;264(1-2):120-2

Cossu D, Masala S, Frau J, Mameli G, Marrosu MG, Cocco E, Sechi LA. Antigenic epitopes of MAP2694 homologous to T-cell receptor gamma-chain are highly recognized in multiple sclerosis Sardinian patients. *Mol Immunol.* 2013 Sep 30;57(2):138-140

Cossu D, Masala S, Frau J, Cocco E, Marrosu MG, Sechi LA. Anti Mycobacterium avium subsp. paratuberculosis heat shock protein 70 antibodies in the sera of Sardinian patients with multiple sclerosis. *J Neurol Sci.* 2013 Sep 13. doi:pii: S0022-510X(13)02897-9. 10.1016/j.jns.2013.09.011.

Masala S, Zedda MA, Cossu D, Ripoli C, Palermo M, Sechi LA. Zinc transporter 8 and MAP3865c homologous epitopes are recognized at T1D onset in Sardinian children. *PLoS One*. 2013 May 17;8(5):e63371. doi: 10.1371/journal.pone.0063371.

Cossu D, Masala S, Cocco E, Paccagnini D, Tranquilli S, Frau J, Marrosu MG, Sechi LA. Association of *Mycobacterium avium* subsp. paratuberculosis and SLC11A1 polymorphisms in Sardinian multiple sclerosis patients. *J Infect Dev Ctries*. 2013 Mar 14;7(3):203-7. doi: 10.3855/jidc.2737

Zanetti S, Sechi LA, Molicotti P, Delogu G, Rubino S. In honor of Professor Giovanni Fadda: a fighter against tuberculosis. *J Infect Dev Ctries*. 2013 Mar 14;7(3):159-60. doi: 10.3855/jidc.3499

Frau J, Cossu D, Coghe G, Lorefice L, Fenu G, Melis M, Paccagnini D, Sardu C, Murru M, Tranquilli S, Marrosu M, Sechi L, Cocco E. *Mycobacterium avium* subsp. paratuberculosis and multiple sclerosis in Sardinian patients: epidemiology and clinical features. *Mult Scler*. 2013 Feb 25.

Cossu D., Masala S. and Sechi L.A. A Sardinian map for multiple sclerosis. *Future Microbiology*. February 2013, Vol. 8, No. 2, Pages 223-232

Molicotti P, Usai D, Cubeddu M, Sechi LA, Zanetti S. Comparison of two molecular methods for diagnosis of Chlamydia trachomatis. *J Infect Dev Ctries*. 2013 Jan 15;7(1):64-6. doi: 10.3855/jidc.2802.

Masala S, Cossu D, Pacifico A, Molicotti P, Sechi LA. *Sardinian Type 1 diabetes patients*, Transthyretin and *Mycobacterium avium* subspecies paratuberculosis infection. *Gut Pathog*. 2012 Dec 27;4(1):24. doi: 10.1186/1757-4749-4-24

Cossu A, Ferrannini E, Fallahi P, Antonelli A, Sechi LA. *Antibodies recognizing specific *Mycobacterium avium* subsp. paratuberculosis's MAP3738c protein in type 1 diabetes mellitus children are associated with serum Th1 (CXCL10) chemokine*. *Cytokine*. 2012 Dec 18. doi:pii: S1043-4666(12)00791-0. 10.1016/j.cyto.2012.11.008

Rani PS, Tulsian NK, Sechi LA, Ahmed N. In vitro cytokine profiles and viability of different human cells treated with whole cell lysate of *Mycobacterium avium* subsp. paratuberculosis. *Gut Pathog*. 2012 Sep 24;4(1):10. [Epub ahead of print] IF 2.1

Manca Bitti ML, Masala S, Capasso F, Rapini N, Piccinini S, Angelini F, Pierantozzi A, Lidano R, Pietrosanti S, Paccagnini D and LA. Sechi. *Mycobacterium avium* subsp. paratuberculosis (MAP) in a Italian cohort of Type 1 diabetes pediatric patients. *Clinical and Developmental Immunology* 2012;2012:785262. Epub 2012 Jul 11.. IF 2.26

Cimaglia F, Aliverti A, Chiesa M, Poltronieri P, De Lorenzis E, Santino A and LA Sechi. Quantum dots nanoparticle-based lateral flow assay for rapid detection of *Mycobacterium* species using anti-FprA antibodies. *Nanotechnology Development* Published: 2012-01-04 17:14:56 DOI: 10.4081/nd.2012.e5

Cossu A, Sechi LA, Zanetti S, Rosu V. Gene expression profiling of *Mycobacterium avium* subsp. paratuberculosis in simulated multi-stress conditions and within THP-1 cells reveals a new kind of interactive intramacrophage behaviour. *BMC Microbiol*. 2012 May 30;12(1):87. [Epub ahead of print] IF 2.96

Scotto M., G. Afonso, E. Larger, C. Raverdy, F.A. Lemonnier, J.C. Carel, D. Dubois-Laforgue, B. Baz, D. Levy, J.F. Gautier, O. Launey, G. Bruno, C. Boitard, L.A. Sechi, J.C. Hutton, H.W. Davidson, R. Mallone. Zinc transporter (ZnT)8 186-194 is an immunodominant CD8+ T-cell epitope in HLA-A2+ type 1 diabetic patients. *Diabetologia*. 2012 55(7): 2026-31 PMID: 22526607 [ (2012). IF 6.973

Cossu D, Masala S, Cocco E, Paccagnini D, Frau J, Marrosu MG, Sechi LA. Are *Mycobacterium avium* subsp. paratuberculosis and Epstein-Barr virus triggers of multiple sclerosis in Sardinia? *Mult Scler*. 2012 Jan 19. [Epub ahead of print] PMID: 22261119. IF 4.23

Cannas S, Molicotti P, Bua A, Usai D, Sechi LA, Scaru AM, Blasi E, Zanetti S. Interaction between *Mycobacterium tuberculosis*, *Mycobacterium bovis*, *Mycobacterium avium* subspecies paratuberculosis with the enteric glia and microglial cells. *Gut Pathog*. 2011 Dec 9;3(1):19. [epub ahead of print]

Liandris E, Gazouli M, Andreadou M, Sechi L, Rosu V, Ikonomopoulos J. (2011). Detection of pathogenic mycobacteria based on functionalized quantum dots coupled with immunomagnetic separation. *PLOS ONE*, ISSN: 1932-6203, doi: PMID: 21637746

Alvi A, Ansari SA, Ehtesham NZ, Rizwan M, Devi S, Sechi L, Qureshi IA, Hasnain SE, Ahmed N. (2011). Concurrent proinflammatory and apoptotic activity of a *Helicobacter pylori* protein (HP986) points to its role in chronic persistence. . *PLOS ONE*, vol. 6, ISSN: 1932-6203, doi: e22530.

Masala S, Paccagnini D, Cossu D, Brezar V, Pacifico A, Ahmed N, Mallone R and Sechi LA. (2011) .Antibodies Recognizing *Mycobacterium avium* paratuberculosis Epitopes Cross-react with the Beta-Cell Antigen ZnT8 in Sardinian Type 1 Diabetic Patients. *PLOS ONE* 6(10) e:26931. doi:10.1371/journal.pone.0026931, Epub 2011 Oct 27 IF 2009: 4.351

Cossu A, Rosu V, Paccagnini D, Cossu D, Pacifico A, Sechi LA. MAP3738c and MptD are specific tags of *Mycobacterium avium* subsp. paratuberculosis infection in type I diabetes mellitus. *Clin Immunol*. 2011 Oct;141(1):49-57. IF 2010: 3.932

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- Di Sabatino, A, Paccagnini, D, Vidali, F, Rosu, V, Biancheri, P, Cossu, A, Zanetti, S, Corazza, GR and L. A. Sechi. Detection of *Mycobacterium avium* subsp. *paratuberculosis* (MAP) specific IS900 DNA and antibodies against MAP peptides and lysate in the blood of Crohn's disease patients. *Inflammatory Bowel Diseases*. 2011 May;17(5):1254-5. doi: 10.1002/ibd.21461. Epub 2010 Sep 2 IF 2009: 4.64
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- Gazouli M., Liandris E, Andreadou A, Sechi LA, Masala S, Paccagnini D, and Ikonomopoulos Specific Detection of Unamplified Mycobacterial DNA Using Fluorescent Semiconductor Quantum Dots and Magnetic Beads. *J. Clin Microbiol.* Aug;48(8):2830-5. Epub 2010 Jun 16. IF 2009: 4.162
- Rocca S., Cubeddu T, Nieddu AM, Pirino S., Appino S, Antuofermo E., Tanda F, Verin R., Sechi LA, Taccini E and A. Leoni. Detection of *Mycobacterium avium* spp. *paratuberculosis* (Map) in samples of sheep paratuberculosis (Johne's disease or JD) and human Crohn's disease (CD) using liquid phase RT-PCR, in situ RT-PCR and immunohistochemistry. *Small Ruminant Research* 88 (2010) 126–134. IF 2009: 1.428
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- Bua A, Rosu V, Molicotti P, Das Gupta SK, Ahmed N, Zanetti S, Sechi LA. Phages specific for mycobacterial lipoarabinomannan help serodiagnosis of tuberculosis. *New Microbiol.* 2009 Jul;32(3):293-6. IF 2009: 0.947
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- Rosu V., Ahmed N., Paccagnini D., Gerlach G., Fadda G., Hasnain SE, Zanetti S., and L.A. Sechi. 2009. Specific immunoassays confirm association of *Mycobacterium avium* subsp. *paratuberculosis* with Type-1 but not Type 2 diabetes mellitus. *PLoS ONE.* 2009;4(2):e4386. Epub 2009 Feb 10. IF 2009: 4.351
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IF2009: 1.963